

I CLAIM:

1. A multi-purpose hand tool comprising: a first member having a first portion and a second portion; a second member slidably and pivotally coupled to the second portion of the first member; and a coupling assembly for pivotally coupling the second member to the second portion of the first member and allowing the second member to slide on and pivot relative to the second portion between a first position proximate a first end of the second portion in which the multi-purpose hand tool can be used to obtain a measurement for a first marking or scribing operation, and a second position proximate a second end of the second portion opposite the first end thereof in which the multi-purpose hand tool can be used to obtain a measurement for a second marking or scribing operation different from the first marking or scribing operation, thereby providing a multi-purpose hand tool reconfigurable for a plurality of purposes.

2. A multi-purpose hand tool according to claim 1; wherein the coupling assembly includes means for pivotally coupling the second member to the second portion of the first member and allowing the second member to slide on the second portion while coupled to the second portion.

3. A multi-purpose hand tool according to claim 1; wherein the coupling means comprises a boss portion extending from a surface of the second member, an elongated slot disposed between the first and second ends of the second portion of the first member for receiving the boss portion, and a releasable locking mechanism cooperating with the boss portion and the elongated slot to allow the second member to slide on and pivot relative to the second portion of the first member.

4. A multi-purpose hand tool according to claim 3; wherein the releasable locking mechanism comprises a knob having a female threaded joint and a fastener having a stem provided with a male threaded joint for engagement

with the female threaded joint of the knob.

5. A multi-purpose hand tool according to claim 4; wherein the first member includes a cutout region in the first portion thereof; and wherein the fastener has a head portion for sliding engagement with a surface of the cutout region during relative sliding movement between the first member and the second member.

6. A multi-purpose hand tool according to claim 1; wherein the first portion of the first member includes at least one sharpener.

7. A multi-purpose hand tool according to claim 1; wherein the first portion of the first member includes a retractable needle assembly.

8. A multi-purpose hand tool according to claim 7; wherein the retractable needle assembly comprises a finger-engagement portion for undergoing rotation in first and second opposite directions over a first surface of the first portion and a pin for undergoing rotation with the finger-engagement portion, the pin having a head portion, a stem extending from the head portion and having a needle point, and a male threaded joint disposed on the stem and between the head portion and the needle point.

9. A multi-purpose hand tool according to claim 8; wherein the first portion of the first member has a through-hole extending from the first surface of the first portion to a second surface thereof opposite the first surface, the through-hole having a female threaded joint for engagement with the male threaded joint of the pin so that upon rotation of the finger-engagement portion in the first direction, the pin is displaced in a direction along a longitudinal axis thereof to protrude the needle point of the stem from an end of the through-hole at the second surface of the first portion, and so that upon rotation of the finger-engagement portion in the second direction, the pin is displaced along the longitudinal axis to retract the needle point into the through-hole.

10. A multi-purpose hand tool according to claim 9; wherein the finger-engagement portion has a cavity for receiving the head portion of the stem so that rotation of the finger-engagement portion in each the first and second directions rotates the pin in the respective first and second direction and allows movement of the head portion of the pin within the cavity along the longitudinal axis.

11. A multi-purpose hand tool according to claim 1; wherein the second member has a top main surface, a bottom main surface, a first end, a second end, and a through-hole disposed at the second end and extending through the top and bottom main surfaces; and further comprising means defining at least one marking pencil rest disposed at the first end of the second member.

12. A multi-purpose hand tool according to claim 11; wherein the means defining a marking pencil rest comprises a notch portion cut in the second member at the first end thereof.

13. A multi-purpose hand tool according to claim 11; further comprising holding means disposed at the second end of the second member for holding a marking pencil.

14. A multi-purpose hand tool according to claim 13; wherein the holding means comprises a tubular insert disposed in the through-hole of the second member, and gripping means extending from an inner peripheral surface of the tubular insert for gripping the marking pencil.

15. A multi-purpose hand tool according to claim 14; wherein the gripping means comprises a plurality of ribs.

16. A multi-purpose hand tool according to claim 1; wherein each of the first member and the second member includes at least one measuring scale.

17. A multi-purpose hand tool according to claim 16; wherein the measuring scales are color-coded.

18. A multi-purpose hand tool according to claim 1; further comprising a pair of through-holes extending

from a first surface of the first portion to a second surface thereof opposite the first surface.

19. A multi-purpose hand tool according to claim 18; wherein each of the through-holes comprises a countersunk hole for receiving therein a fastener to connect the multi-purpose hand tool to a frame member.

20. A multi-purpose hand tool according to claim 1; wherein each of the first member and the second member are fabricated from a transparent material.

21. A scribing apparatus comprising:

a first member having a first surface for contacting a surface of a material to be marked or scribed, a second surface disposed opposite the first surface, and a longitudinal slot extending from the first surface to the second surface;

a second member slidably and pivotally coupled to the first surface of the first member, the second member having a first main surface, a second main surface disposed opposite the first main surface, and a through-hole extending from the first main surface to the second main surface, the through-hole being generally vertically aligned with the longitudinal slot of the first member at preselected positions of the second member relative to the first member;

a coupling assembly for pivotally coupling the second member to the first surface of the first member and allowing the second member to slide on and pivot relative to the first surface of the first member; and

a cutting tool having a cutting member for insertion generally vertically through the through-hole of the second member and the longitudinal slot of the first member in any of the preselected positions for contacting the surface of the material to mark or scribe a line in the surface of the material when the first member and the second member are displaced relative to the material while the first member is maintained in contact with the surface

of the material.

22. A scribing apparatus according to claim 21; wherein each of the first member and the second member includes at least one measuring scale.

23. A scribing apparatus according to claim 22; wherein the measuring scales are color-coded.

24. A scribing apparatus according to claim 21; wherein the first member has a central longitudinal axis; and further comprising a pair of through-holes extending from the first surface to the second surface of the first member and on opposite sides of the longitudinal axis thereof.

25. A scribing apparatus according to claim 24; wherein each of the pair of through-holes comprises a countersunk hole for receiving therein a fastener to connect the multi-purpose hand tool to a frame member.

26. A scribing apparatus according to claim 21; wherein each of the first member and the second member are fabricated from a transparent material.

27. A multi-purpose hand tool comprising: a first member having a first portion and a second portion; and a second member slidably and pivotally coupled to the second portion of the first member so that the second member can slide on and pivot relative to the second portion between a first position proximate a first end of the second portion in which the multi-purpose hand tool can be used to obtain a measurement for a first marking or scribing operation, and a second position proximate a second end of the second portion opposite the first end thereof in which the multi-purpose hand tool can be used to obtain a measurement for a second marking or scribing operation different from the first marking or scribing operation.

28. A multi-purpose hand tool according to claim 27; further comprising a pair of through-holes extending from a first surface of the first portion to a second

surface thereof opposite the first surface.

29. A multi-purpose hand tool according to claim 28; wherein each of the pair of through-holes comprises a countersunk hole for receiving therein a fastener to connect the multi-purpose hand tool to a frame member.

30. A multi-purpose hand tool according to claim 27; wherein each of the first member and the second member are fabricated from a transparent material.

31. A multi-purpose hand tool comprising: a first member having a first surface for contacting a surface of a material to be marked or scribed, a second surface disposed opposite the first surface, and a longitudinal slot extending from the first surface to the second surface; and a second member slidably and pivotally coupled to the first surface of the first member, the second member having a first main surface, a second main surface disposed opposite the first main surface, and a through-hole extending from the first main surface to the second main surface, the through-hole being generally vertically aligned with the longitudinal slot of the first member at preselected positions of the second member relative to the first member for receiving therethrough a marking pencil or a scribing tool so that the multi-purpose hand tool can be used to mark or scribe a line in the surface of the material when the marking pencil or the scribing tool is inserted generally vertically through the through-hole of the second member and the longitudinal slot of the first member in any of the preselected positions and is maintained in contact with the surface of the material while the first member and the second member are displaced relative to the material.

32. A multi-purpose hand tool according to claim 31; further comprising a pair of through-holes extending from a first surface of the first portion to a second surface thereof opposite the first surface.

33. A multi-purpose hand tool according to claim

32; wherein each of the pair of through-holes comprises a countersunk hole for receiving therein a fastener to connect the multi-purpose hand tool to a frame member.

34. A multi-purpose hand tool according to claim 31; wherein each of the first member and the second member is fabricated from a transparent material.

35. In combination: a multi-purpose hand tool comprised of a first member having a first portion and a second portion, a second member slidably and pivotally coupled to the second portion of the first member, and a coupling assembly for pivotally coupling the second member to the second portion of the first member and allowing the second member to slide on and pivot relative to the second portion between a first position proximate a first end of the second portion in which the multi-purpose hand tool can be used to obtain a measurement for a first marking or scribing operation on a piece of material, and a second position proximate a second end of the second portion opposite the first end thereof in which the multi-purpose hand tool can be used to obtain a measurement for a second marking or scribing operation on the piece of material different from the first marking or scribing operation; a frame member having a first end portion and a second end portion opposite the first end portion; and connecting means for removably integrally connecting the first end portion of the frame member to the first portion of the first member of the multi-purpose hand tool and for removably connecting the second end portion of the frame member to the piece of material to allow relative movement between the frame member and the piece of material.

36. A combination according to claim 35; wherein the connecting means comprises a pair of through-holes extending from a first surface of the first portion of the first member to a second surface thereof opposite the first surface, a pair of first fasteners extending through the respective through-holes and engaging the first end portion

of the frame member, and a second fastener extending through the second end portion of the frame member and engaging the piece of material.

37. A combination according to claim 35; wherein the first and second members of the multi-purpose hand tool are fabricated from a transparent material.